

ABSTRACT

A call signaling protocol that uses simplified messaging to set up, confirm set up, tear down, and confirm tear down of a connection. The available capacity of communications links is tracked so that it can be quickly determined whether or not a link can handle a call. Segments (e.g., time slots, wavelengths, etc.) of a link having enough available capacity are allocated by a separate operation. Connection state information is also tracked. The simple messages and information used by the signaling protocol permits it to be easily implemented in hardware. Such an implementation enables high-speed, high-capacity, call signaling.